FIGURE 1A

100 Waste Water Drawn Into Reactor Waste Water Flow 105 Continues Mix Fill Phase Waste Water Is Mixed With Activated Sludge Anoxic Environment 110 Waste Water Flow · React Fill Phase Continues Mixing Of Waste Water And Activated Sludge Alternating Aerobic And Anoxic Environments 115 Waster Water Flow React Discharge Phase Discontinues Alternating Aerobic And Anoxic **Environments** Waste Water/Solids

Mixture Directed To Membrane Unit For Solids Liquids Separation

FIGURE 1B

Waste Water

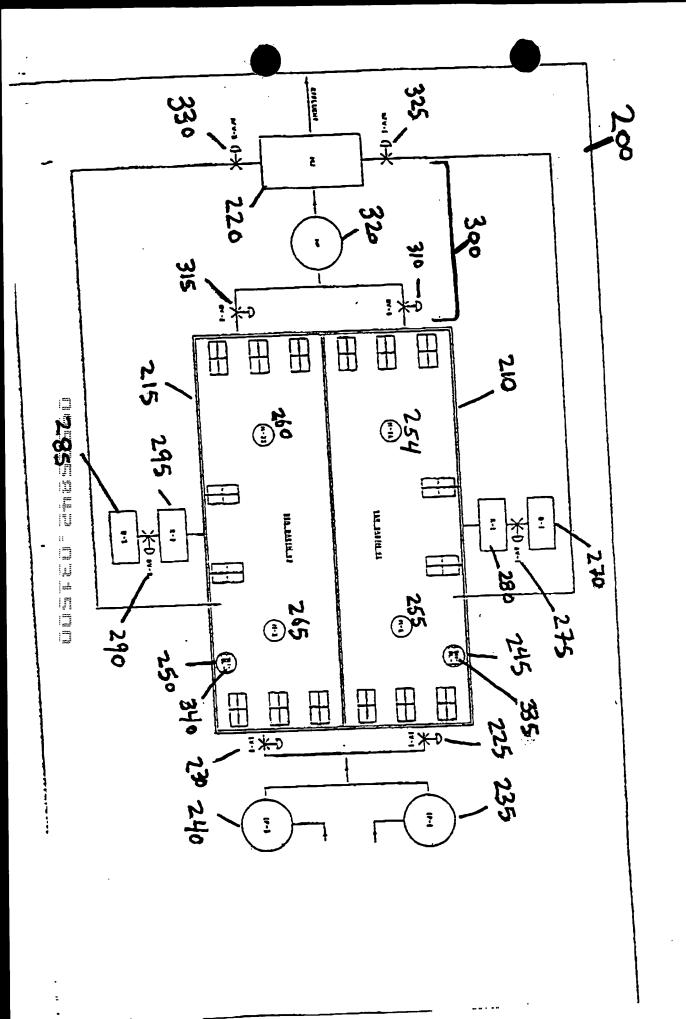
120

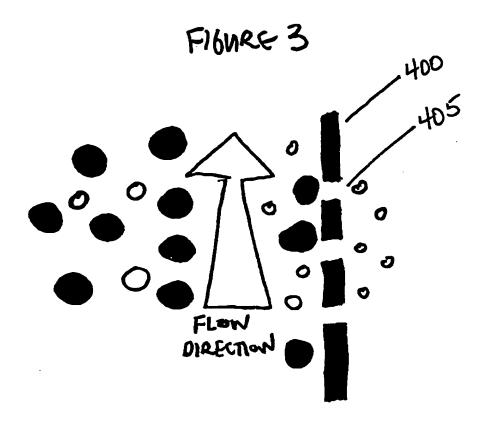
Drawn Into Reactor Waste Water Flow 125 Continues Mix Fill Phase Waste Water Is Mixed With Activated Sludge Anoxic/Anaerobic Environment 130 Waste Water Flow React Fill Phase Continues Mixing Of Waste Water And Activated Sludge Alternating Aerobic And Anoxic **Environments** 135 Waste Water Flow React Phase Discontinues Alternating Aerobic And Anoxic Environments

Phase Time Adjustment

(FIGURE 1B CONTINUED)

•	No Water Flow No Mixing No Aeration Quiescent Environment For Solids/Liquid Separation	Settle Phase	140
		1	
•	Quiescent Environment Mechanical Decanter Used To Remove Purified Liquid	Decant Phase	145
	•	1	
•	Quiescent Conditions	Idle Phase	150





- = CONTAMINANT MOLECULE
- 0 = H20 MOLEGULE